REMARKS

Reconsideration of the above-identified application is respectfully requested.

Claims 1–4 were rejected as unpatentable over Murayama et al. in view of Handy. There is no basis for the combination proposed by the Examiner; *In re Rouffet* 47 USPQ2d 1453 (Fed. Cir. 1998). The rationalization given, "so that a chip ... can be manufactured economically," suggests that the cost of a chip is determined by the logic contained. This makes no sense technically. An integrated circuit is a plurality of layers formed sequentially. What the layers represent does not affect the cost of the layers. Only if a layer, or a process step, can be eliminated is cost affected. The Examiner has not shown that the CCD device disclosed in the Handy publication requires fewer layers to construct than other forms of logic. It is believed that charge coupled devices are significantly more expensive, not less expensive, than other digital logic circuits. Further, there is no reason to believe that the combination proposed is technically feasible.

The real mystery is why the Handy publication is cited at all. The Examiner spends a great deal of effort justifying modification of exclusive-OR gate (71) when a second exclusive-NOR gate is not recited.

The Examiner asserts that the Murayama et al. patent discloses "controlling a second counter (73) based upon the results of the first counter." An inspection of FIG. 9 reveals that this is impossible. There is no connection between counters 66 and 73.

The Examiner also relies on column 9, lines 29–41, from the Murayama et al. patent. The text reads as follows.

> The exclusive NOR gate **69** detects coincidence or correlation between transition points in corresponding positions in the current and preceding scan lines respectively and the counter **66** counts these points. The exclusive OR gate **71** produces a high output whenever the two inputs thereto are different, thereby sensing non-coincidence between transition points. The counter **73** counts the non-coincident transition points.
>
> The correlation coefficient is determined as follows:
>
> $$r = \frac{\text{number of correlated transition points}}{\text{number of non-correlated transition points}} \qquad (11)$$

Note that (1) the two counters count very different and unrelated things. One parameter is not related or derivable from the other. (2) The second counter (73) is NOT controlled "based upon the results of the first counter." (3) The quoted portion of the Examiner's remarks have nothing to do with actual claim language. (4) The last three clauses of claim 1 are ignored by the Examiner.

Claims 5–7 were rejected as unpatentable over Murayama et al. in view of Handy, further in view of Braams et al. All of the foregoing remarks also apply to this rejection. The addition of the Braams et al. patent overcomes none of the deficiencies in the teachings of the Murayama et al. patent. The alleged apparatus does not exist and there is not the slightest basis for the combination.

In view of the foregoing, it is respectfully submitted that claims 1–7 are in condition for allowance and a Notice to that effect is respectfully requested.

Respectfully submitted,

Paul F. Wille
Reg. No. 25,274
Attorney for Applicants

6407 East Clinton Street
Scottsdale, Arizona 85254
Tel.: (602) 549–9088